

## PATENT ABSTRACTS OF JAPAN

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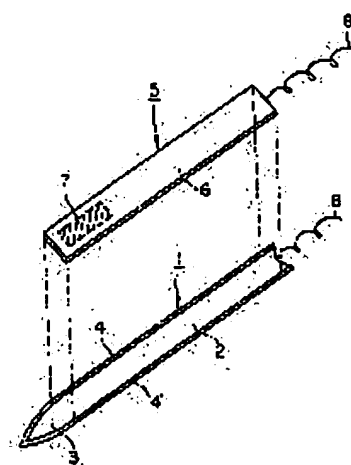
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### (54) GLUCOSE SENSOR

#### (57)Abstract:

**PURPOSE:** To facilitate the immobilization of enzyme and manufacturing by a method wherein a glucose oxidase immobilizing flat plate-shaped acting electrode is bonded to the cut surface of a hollow needle like opposed electrode through an insulating layer in such a state that the enzyme immobilizing surface of the acting electrode is turned toward the inside.

**CONSTITUTION:** A hollow needle like opposed electrode 1 is formed by obliquely cutting the leading end part of the half cut body of a platinum hollow needle. Glucose oxidase (GOD) 7 is immobilized on the single surface of a GOD immobilizing flat plate-shaped acting electrode 5. The acting electrode 5 is bonded to the electrode 1 through the epoxy resin adhesive layer applied to the cut surface of the electrode 1 so that the enzyme immobilizing surface of the acting electrode 5 is turned toward the inside. By this method, a sensor easy in the immobilization of enzyme and manufacturing, easily inserted in a living body and suitable for measuring a sugar level in blood is obtained.



### LEGAL STATUS

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これらの圓形成材料によって形成される膜上へのGODの固定化は、グルタルアルデヒド、カルボジイミドなどを用いる共有結合法、イオン結合法、吸着法、架橋法など一般的に用いられている方法によって行われる。あるいは、膜形成材料の溶液中などにGODを混合しておき、膜形成時にこれらの固定化方法により固定化させることもできる。この場合、光架橋性重合体が用いられたときには、その光架橋はGODを失活させない波長である約350~450nmの近紫外線による光照射によって行わ

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